

## NOTES ON TURKISH EUPHORBIA

A. RADCLIFFE-SMITH\*

**ABSTRACT.** *Euphorbia rhabdotosperma* A. Radcliffe-Smith is newly described from Turkey, USSR and Iran, whilst *E. ancyrensis* [Aznavour ex] M. S. Khan is reduced to synonymy under *E. coniosperma* Boiss. & Buhse. A possible new variety of *E. macrostegia* Boiss. is indicated, albeit not formally described.

***Euphorbia rhabdotosperma* A. Radcliffe-Smith, sp. nov.** (Subgen. *Esula* Pers. sect. *Helioscopia* Dumort., em. Tutin, subsect. *Helioscopiae* Prokh. em. Smith) affinis *E. helioscopiae* L., a qua imprimis statura humiliore seminibus longitudinaliter striato-rugulosis neque favoso-reticulatis differt.

Herba annua glabra vel parce pilosa vulgo usque 15 cm alta, raro usque 30 cm alta, formam nanam *E. helioscopiae* adspectu referens. *Folia caulina* obovato-spathulata, 0.5-1.3(-2) cm  $\times$  2-5(-8) mm, obtusa vel retusa, basi attenuata, subintegra vel in dimidio superiore serrulata. *Folia umbellae radiorum* obovato-oblongata; *folia umbellulae radiorum* oblique ovata vel oblonga, 5-11  $\times$  3-7 mm, basi asymmetricice rotundato-cuneata. *Umbella* 4-5-radiata, radii usque quater trichotomis. *Radii axillares* 0. *Glandulae cyathii* transverse ellipticae. *Regma* laeve, 2.5-3 mm diametro. *Semina* ovoidea, 2 mm longa, 1.5 mm lata, longitudinaliter striato-rugulosa, fusca; caruncula applanata, late lunata.

**TURKEY.** B3 Eskişehir: hill above Sivrihisar, on dry limestone rocks, 1200-1300 m, 22 vi 1962, *Dudley* (Davis 36036). B4 Ankara: steppe-grassland at Gazi Çiftlik, 9 v 1933, *Kotte* 1017. C2 Burdur: Tefenni ovasi nr. Karataş göl, in steppe, 1100 m, 4 iv 1956, *Davis* 25624. C3 Antalya: Korkuteli, 1100 m, 18 iv 1936, *Tengwall* 371; Elmali-Korkuteli, 8 km from Elmali, in dry steppe, 1120 m, 31 iii 1962, *Dudley* (Davis 35223) [holo. E; iso. K].

**USSR.** Daghestan ASSR: Akhty, *Becker* s.n.

**IRAN.** Khorasan: 50 km E of Soltanabad, at edge of irrigated wheatfields in fine red earth, 1400 m, 10 iv 1964, *Furse* 5229.

This unassuming, rather weedy-looking little annual spurge has the superficial appearance of a dwarf form of *E. helioscopia* L., more particularly the form described from Spain in 1863 by Loscos & Pardo as a distinct species, which they named *E. helioscopioides*. However, it is found upon examination that the seeds present quite a different appearance from those of all the forms of *E. helioscopia*, since they are consistently longitudinally striate-rugulose instead of being favose-reticulate (Plate 5, A-D). This fact was apparently overlooked by M. S. Khan (in Notes R.B.G. Edinb. 25:109, 1964), who cited some of the Turkish gatherings listed above under *E. helioscopia*. Thus our knowledge of the *helioscopia*-group of *Euphorbia* subgen. *Esula* sect. *Helioscopia* subsect. *Helioscopiae* continues to grow as this is the third new SW Asiatic species belonging to this group which has been described in the last few years.

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The apparent disjunction in the distribution may simply be due to under-collecting.

**E. conisperma** Boiss. & Buhse in Nouv. Mém. Soc. Nat. Mosc. 13:196 (1860).  
Types: Iran, Gamarlu, *Buhse* s.n. (syntype G); Soviet Armenia, Yerevan, *Buhse* s.n. (syntype G).

Syn.: *E. ancyrensis* [Aznavour ex] M. S. Khan in Notes R.B.G. Edinb. 25:106 (1964). Type: Turkey, A/B4, Ankara, *Frères E.C.* s.n. in herb. Aznavour (holo. G).

**E. macrostegia** Boiss. in DC., Prodr. 15(2):171 (1862).

Type: S Iran, Fars, Kuh Delu, 16 vi 1842, *Kotschy* 533 (holo. G; iso. BM, K).

An anomalous specimen in the Edinburgh herbarium from the Amanus (*Akman* 22, from near Osmaniye) is clearly referable to this species, but in many respects is very distinct. It has shortly pilose stems and ovaries, large 2nd year cauline leaves, ray-leaves and raylet-leaf "cups", longer rays and lacinate glands, and may well represent a distinct variety. However, the lower part of the stem with 1st year cauline leaves, and ripe regmata and seeds will be needed before a formal description can be made.

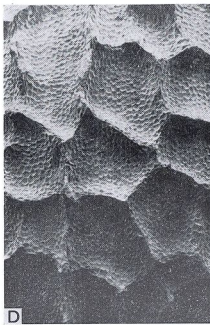
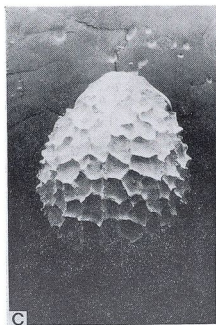
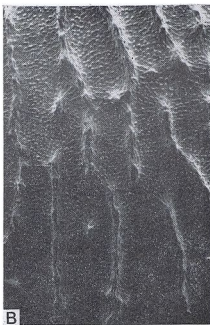
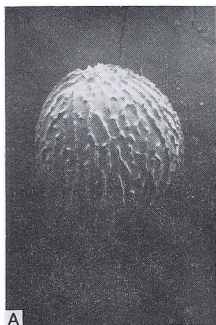


PLATE 5. Scanning electron micrographs of *Euphorbia* seeds. A, B: *E. rhabdotosperma*, lateral views of seed. C, D: *E. helioscopia*, dorsal views of seed. A  $\times$  20, B  $\times$  c. 66, C  $\times$  20, D  $\times$  c. 66.